Claims:

1. A process for the preparation of protein hydrolysate from soy flour, said process comprising: hydrolyzing aqueous slurry of defatted soy flour containing 6-30% solid content w/v using proteolytic enzyme of plant origin at pH 5-9 and temperature of 53± 5°C under stirring for 30 minutes to 6 hours; inactivating the enzyme by a known manner; neutralizing the pH value of the slurry; separating the solids by a known manner and drying the clarified liquor so obtained to get the said hydrolysate.

2. A process as claimed in claim 1, wherein the solid content of the slurry is 20% w/v.

3. A process as claimed in claim 1, wherein the plant origin proteolytic enzyme is selected from the group comprising of papain and bromelin.

4. A process as claimed in claim 1, wherein 0.4-0.6% w/w of the proteolytic enzyme is added to the soy flour.

5. A process as claimed in claim 1, wherein the hydrolysis is effected for a period of 3-4 hours.

6. A process as claimed in claim 1, the drying is effected by freeze drying, spray drying and drum drying.

7. A process as claimed in claim 1, wherein the protein hydrolysate produced has decreased bitterness.

8. A process as claimed in claim 1, wherein the protein hydrolysate produced is less hygroscopic in nature.

9. A process as claimed in claim 1, wherein the protein hydrolysate has 2-2.2g/100ml bitterness recognition threshold.

10. A process as claimed in claim 1, wherein the protein hydrolysate produced has low mineral content.

11. A process as claimed in claim 1, wherein high yield of protein hydrolysate with 30 to 35% degree of hydrolysis is obtained from the raw material taken.

12. A process as claimed in claim 1, wherein protein hydrolysate obtained has creamy color and a yield of 20-25% (on flour basis).

13. A process as claimed in claim 1, wherein protein hydrolysate has 3.0 to 5.0% moisture, 8.0 to 8.5% nitrogen and 30.0-35.0% degree of hydrolysis.

14. A process as claimed in claim 1, wherein the protein hydrolysate obtained has 25-30 trypsin inhibitor units/mg activity, 95 to 98% Nitrogen Solubility Index and 1.0 to 1.4% of salt content.

15. A process as claimed in claim 1, wherein lipoxygenase and urease activities of the protein hydrolysate are not detectable.

16. A process as claimed in claim 1, wherein the amino acid composition of the protein hydrolysate was similar to the amino acid makeup as that of the starting material.

17. A process as claimed in claim 1, wherein the protein hydrolysate retained the nutrition value as in the starting material.

18. A process as claimed in claim 1, wherein the protein hydrolysate does not impart any undesirable flavor for the finished product.

19. A process as claimed in claim 1, wherein the solubility of the protein hydrolysate is independent of the pH value.

20. A protein hydrolysate obtained from soy flour, comprising lour 20 to 30 trypsin inhibitor units/mg activity, 95 to 98% Nitrogen Solubility Index, 1 to 1.4% of salt content 3 to 5% moisture, 8 to 8.5% nitrogen and 30 to 35% degree of hydrolysis.

21. A protein hydrolysate as claimed in claim 20, wherein the lipoxygenase and urease activities are not detectable.

22. A protein hydrolysate as claimed in claim 20, further comprising 2 to 2.2g/100ml bitterness recognition threshold.

23. A protein hydrolysate as claimed in claim 20, wherein the amino acid composition of the protein hydrolysate is similar to the amino acid makeup of the starting material.

24. A protein hydrolysate as claimed in claim 20, wherein the protein hydrolysate retained the nutrition value present in the starting material.

25. A protein hydrolysate as claimed in claim 20, wherein the protein hydrolysate does not impart any undesirable flavor for the finished product.

26. A protein hydrolysate as claimed in claim 20, wherein the solubility of the protein hydrolysate is independent of the pH value.

27. A protein hydrolysate as claimed in claim 20, has cream color.